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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GUIDOTTI, LAURA COLE

ART UNIT PAPER NUMBER

1744

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,946

Applicant(s)

WATKINS, CHARLES E.

Examiner

Laura C. Guidotti

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42 and 44 is/are allowed.
- 6) ☒ Claim(s) 26-41 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 08092006.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The Examiner has received and considered both Webpage submissions on the Information Disclosure Statement of 09 August 2006, however the U.S. Patents cited on this Information Disclosure Statement have all been considered previously.

Specification

2. The disclosure is objected to because of the following informalities: In paragraph 99 it is believed that there is a typographical error and that "rotatable surface pad **253**" is actually meant to state "rotatable surface pad **453**".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 43 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 43 Lines 19-20 recite, "...that said scrubbing material is *eccentrically* rotatable in response to said varying magnetic field..." Nowhere in the specification is that the scrubbing material is "eccentrically rotatable" disclosed or described.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 26-27, 30, 32, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohtaki et al., USPN 3,983,591.

Ohtaki et al. disclose the claimed invention including a variable power unit (in that cleaning element C can be turned on and off, or 0 power and operating power, Column 1 Lines 55-59) having a power unit body casing (outer casing of C) and a power induction unit (3) wherein the power induction unit produces a varying magnetic field (in that when power is off or at 0, there is not a magnetic field [minimal magnetic field] and when the power is on there is a magnetic field, Column 1 Lines 55-59) in response to supplied power (power supplied via 9; Column 1 Lines 53-60) and a pad unit (C', pad is 2') having at least one piece of ferrous or magnetic material (3') that moves in response to the varying magnetic field produced by the power induction unit (Column 1 Lines 55-66). Regarding claims 27 and 30, the power unit is held against a first surface (right side of G) by an operator (via 5; Column 1 Lines 63-64) and the movable pad unit is held against a second surface (left side of G) by way of magnetic attraction of the movable pad unit to the magnetic field produced by the power induction unit (Column 1 Lines 63-66). Further regarding claim 30, the pad unit has a rotatable pad section (2') that rotates to scrub the second surface in response to the rotation of the ferrous or

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magnetic material (Column 1 Lines 55-63). Regarding claim 32, the power induction unit has at least one electromagnet (3, Column 1 Line 55) and a control unit (switch 4) which produce a variable magnetic field in response to the power supplied from a source of electrical power (in that by switching the power, the magnetic field varies from having a minimal magnetic field to a fully powered magnetic field), and the pad moves in response to the variable magnetic field (when the switch is turned on, the pad unit moves in response via magnetic attraction Column 1 Lines 55-63, Column 2 Lines 1-4). The power induction unit receives power from a power cord (9).

5. Claims 26-27, 38, and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Howard, USPN 1,357,869.

Howard discloses the claimed invention including a variable power unit having a power unit body casing (outer casing of 10; power unit is variable in that it is capable of being turned on or off via electric socket, Page 1 Lines 53-54) and a power induction unit (10) wherein the power induction unit produces a varying magnetic field in response to supplied power (Page 1 Lines 62-73, when electrical power is off, the magnetic field is zero) and a pad unit (7, pad is 6) having at least one piece of ferrous or magnetic material (7; Page 1 Lines 46-51) that moves in response to the varying magnetic field produced by the power induction unit (Page 1 Lines 60-71, when the magnetic field has electric current supplied, the magnetic material moves in response to that power). The power unit is held against a first surface by an operator (via 12) and the movable pad unit is held against a second surface by magnetic attraction of the movable unit to the

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magnetic field produced by the power induction unit (Page 1 Lines 52-71). The power induction unit receives power from a power cord (11) and transformer (13).

6. Claims 26, 27, 29, and 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Russell, USPN 3,646,630.

Russell discloses the claimed invention including a variable power unit having a power unit body casing (outer casing of 47; power unit is variable in that it is capable of having electric current supplied or not supplied to it or not via coils 307, 308, 309, 310, Page 4 Lines 15-18, Figure 10) and a power induction unit (305, 306, 307, 308, 309, 310) wherein the power induction unit produces a varying magnetic field in response to supplied power (223 or see Figure 10, power supplied at 1054; or when the current through coils 307, 308, 309, and 310 are turned off there is not current supplied and thus little or no magnetic field and when it is turned on there is a more substantial electric field) and a pad unit (45, pad is 291, 292, 293, 294; Figure 6) having at least one piece of ferrous or magnetic material (301, 302, 303, 304) that moves in response to the varying magnetic field produced by the power induction unit (Column 4 Lines 10-17). The power unit is held against a first surface by an operator (via 217; Column 3 Lines 54-57) and the movable pad unit is held against a second surface by magnetic attraction of the movable unit to the magnetic field produced by the power induction unit (Column 4 Lines 10-17). The power unit that produces a magnetic field are a first plurality of fixation units that produce localized magnetic fields (305, 306; Column 4 Lines 14-15) and the pad unit comprises a second plurality of fixation units that are attracted to the localized magnetic fields produced by the first plurality of fixation units

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(301, 302, 303, 304). The power induction unit receives power from a power cord (225) and a battery (223).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 28 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtaki et al., USPN 3,983,591, as applied to claim 26, in view of Langenfeld, DE 3630324 and Zipperer, USPN 3,554,497.

Ohtaki et al. disclose all elements above including that the power induction unit has an electric motor (M) to thereby produce a variable magnetic field in response to power supplied from a source (the magnetic field again varies from a minimal field when no power is supplied and a regular full magnetic field when power is supplied), however Ohtaki et al. does not disclose that the electric motor that rotates at least one magnet wherein the pad unit rotates in response to the rotation of the magnet.

Langenfeld discloses a cleaning device that has an electric motor (2; see English translation of Abstract) that rotates at least one magnet (7) in response to a power supply (5). A cleaning pad (8) appears to rotate simultaneous to the magnet (7), as they are part of a same unit body (15; see Figure 2). A more thorough cleaning of glass panes is carried out through the rotational movement (see English translation of Abstract).

Zipperer discloses a magnet arrangement that has a power unit having a power unity body casing (21) and a power induction unit (22, 23, 24, 25) and a separate unit (33) that moves in response to the magnetic field produced by the power unit (Abstract). The power induction unit has a controller (26) that rotates at least one magnet to produce a variable electric field (Column 1 Lines 51-60) in response to power supplied from a source of electrical power (Column 3 Lines 7-16), wherein the other unit (33) rotates in response to the rotation of the magnet (Column 1 Lines 61-64). The power induction unit has at least two or a plurality of electromagnets (23; Figure 3) and a control unit (26) having a control surface (button, 27) that a user controls to produce a variable magnetic field having a force of magnetic attraction (Column 1 Lines 51-60; Column 3 Lines 10-16). The other unit (33) moves in response to variations in the polarity or force of magnetic attraction of the power induction unit plurality of electromagnets (Column 1 Lines 51-60).

It would have been obvious for one of ordinary skill in the art to modify the power induction unit of Ohtaki et al. to have an electric motor so that the power induction unit will rotate, as Langenfeld teaches, so that a rotating cleaning motion is provided to the

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pane cleaner, and it would have been obvious for one of ordinary skill in the art to modify the power induction unit of Ohtaki et al. so that it produces a variable magnetic field through a plurality of electromagnets and a controller, as Zipperer teaches, in order to vary and control the speed at which a following unit having magnetic material rotates.

8. Claims 26-27, 31, 36-38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson, USPN 6,634,052 in view of Howard, USPN 1,357,869.

Hanson discloses the claimed invention including a “power” unit (12) having a body casing (16) and a unit that produces a magnetic field (permanent magnet 24, Column 2 Lines 19-24) and a pad unit (10) that has at least one piece of magnetic material (also 24) that moves in response to the magnetic field produced by the “power” unit (Column 4 Lines 8-19). The “power” unit (12) is held against a first surface and the pad unit (10) is held against a second surface by way of magnetic attraction (Column 4 Lines 8-19), and the magnetic material is sealed in a water impermeable material (Column 1 Lines 62-66; Column 2 Lines 55-58) and induces agitation of the pad unit to scrub the second side of the wall (Column 1 Lines 62-66). The pad unit is positively buoyant (Column 2 Lines 51-61). The magnetic material of the pad unit is encapsulated by water impermeable material (Column 1 Lines 62-66). Hanson does not disclose that the power unit has a variable power induction unit that produces a varying magnetic field in response to supplied power.

Howard discloses all elements above, particularly a variable power induction unit (10) wherein the power induction unit produces a varying magnetic field in response to supplied power (Page 1 Lines 62-73; the power unit is variable in that it is capable of

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being turned on or off via electric socket and the magnetic field varies from a minimal or 0 when the unit is off and not supplied via electrical power and has a more substantial magnetic field with there is power supplied). The power induction unit receives power from a power cord (11) and transformer (13).

It would have been obvious for one of ordinary skill in the art to substitute the permanent magnet of the "power" unit of Hanson for a variable power induction unit that produces a varying magnetic field, as Howard teaches, so that the "power" unit does not always or permanently produce a magnetic field making the device easier for storage or placement when the cleaner is not being used.

9. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howard, USPN 1,357,869 as applied to claim 26 in view of North, USPN 3,461,476.

Howard discloses all elements above including that the variable power induction unit receives power from a power cord (11; see Figure 1). Howard does not include a ground fault interrupting switch or a fuse.

North discloses a window cleaner having a power cord and a motor that further includes a fuse (68) in order to protect the circuitry of the window cleaning device (Column 4 Lines 29-31).

It would have been obvious for one of ordinary skill in the art to modify the power cord system of Howard to further include a fuse, as North teaches, in order to protect its electric components from surges in electricity.

Allowable Subject Matter

10. Claims 42 and 44 are allowed.

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The following is a statement of reasons for the indication of allowable subject matter: None of the prior art made of record includes a handheld magnetic scrubber comprising a power unit having a first housing, a plurality of magnets distributed about a surface of said first housing, and a plurality of electromagnets mounted within said first housing, wherein said plurality of electromagnets produce a varying magnetic field in response to changes in power supplied to each of the plurality of electromagnets, a pad unit having a second housing, at least one piece of ferrous or magnetic material distributed about a surface of said second housing, a bore formed in the second housing, a scrubbing material releasable received in the second housing bore, wherein the scrubbing material is rotatable with respect to the second housing, at least one piece of ferrous or other magnetic material operatively coupled to the scrubbing material so that the scrubbing material rotationally moves in response to the varying magnetic field produced by the plurality of electromagnets, wherein the power unit is placed on an aquarium wall and the pad unit is placed on the inside of the aquarium wall opposite the power unit, the plurality of first housing magnets attract the pad unit at least one piece of ferrous or magnetic material to maintain the pad unit adjacent the power unit as said scrubbing material is rotated with respect to the second housing.

Response to Arguments

11. Applicant's arguments filed 09 August 2006 have been fully considered but they are not persuasive.

The Applicant contends that "Ohtaki et al., Howard, and Russell each fail to teach or disclose a power unit that produces a varying magnetic field in response to a varying

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power supply that causes at least one piece of ferrous or any other magnetic material to move in response to the varying magnetic field. However, each of Ohtaki et al., Howard, and Russell include a variable power unit, in that the power unit may be turned on or off at the supply and therefore as a result having a varying magnetic field that varies between when there is not any electric current supplied to the electromagnet resulting in a minimal or zero amount of electric field and when electric current is supplied to the electromagnet there is a full capacity of the devices' magnetic field. Therefore, as the power supply can be varied between on or off, the magnetic field is capable of being varied and is considered to be a variable magnetic field.

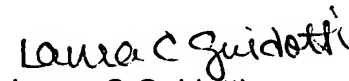
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Laura C Guidotti
Patent Examiner
Art Unit 1744

lcg